


REMARKS ON QUIZ AND READINGS

E llsberg - lect. 4

✓ You will have gathered already in the first three lectures that the general framework within which I am approaching the subject of nuclear weapons policy in the world is that nuclear weapons present themselves to statesmen as instruments of threat above all and that what one sees going on in the world today in the area of nuclear weapons policy is the making of threats, efforts to make those threats more effective, more credible, and efforts to resist threats, efforts to redirect them, a great deal of threat phenomena. I found 25 years ago as a economist and economic theorist interested in a field called bargaining theory that the subject of threats was not well conceptualized then in economic theory. I think that's still true today, in fact, as I've looked at references that keep coming out. I find the same deficiencies in the analytic framework that I found a long time ago. These deficiencies in particular deal with the conceptualization of uncertainty, the role of risk taking, of gambling, of decision making under uncertainty in the area of bargaining and in the area of threats. And because, I think, of this inadequate treatment of the role of uncertainty the general area of threats in bargaining is not adequately understood. And in turn I believe because of this generally inadequate understanding of that area, its role in economic life and political life and in diplomatic affairs remains underappreciated in a lot of ways.

✓ We're talking of course in particular about threats with nuclear weapons. And the idea is not a new one but in fact goes back almost to

the very beginning of the nuclear era that nuclear weapons change the nature of diplomacy drastically and even of war making in that they effectively make threats impossible. Bernard Brody's work in 1946, The Absolute Weapon on the A-bomb suggested that strongly. From now on, he said, the purpose of the military can be no other than to avert war, to deter war, it has almost no other useful purpose. Warmaking he saw, a bit prematurely, applying to the atom bomb properties that were more properly attached to the H-bomb that was still to come a decade later. He did see, however, that war as I suggested last time had been converted from a process of combat between military forces to a process of massacre and potentially a process of mutual massacre such that it could seem to serve no useful nature as an instrument of policy. And thus war, the alleged final arbiter of disputes, the resolver of disputes, the instrument that brought matters to a decisive conclusion no longer existed in that form. You'll notice by the way if you are reading Jonathan Schell's work in the recent New Yorkers as well as his earlier book, that's a theme that Schell presses a good deal, that nuclear weapons, especially now that they are associated with the possibility or likelihood of nuclear winter or the destruction of all life not only lose credibility as possible threats themselves, but in doing so deprive diplomacy and the relation between sovereign states of this final court of appeal, a place of resolving disputes, and something must be put in their place. You'll notice though that the subject matter of this course so far has been what I assert to be the continuation of threats. The threats continued to be made. Let me express this as I see (in my

lectures of a quarter of a century ago) this same issue arising at that time. 

In 1950 a prominent statesman, international lawyer serving both Democrats and Republicans, later the Secretary of State, said this, in 1950 now, a year after the first test of a Soviet nuclear weapon: "The Soviet Union by quickly bringing our monopoly to an end radically altered the strategic situation to its own advantage. The United States' ability to deliver bombs in Russia is now largely neutralized by the ability of the Soviets to deliver atomic bombs in the United States and Western Europe. Perhaps the position is more than neutralized for our economy may be more vulnerable than that of the Soviet Union to atomic attack." That was John Foster Dulles, a name which, like a lot of things in these lectures, had a good deal more resonance for my audience say 25 years ago than it probably does for you. Because by the time I was giving this lecture (which was 1959 or nine years later) Dulles had been Secretary of State since 1953 and was famous for what is usually described as blustering, for bluffing, for rhetoric, having to do with nuclear weapons. But as he himself described it in an article which is on your reading list, "How Dulles Averted War," a very famous article of 1956, he gave exclusive interviews to James Shepley of Time Life in which he described for the first time nuclear threats which he asserted he had made in the name of Eisenhower on a number of occasions (some of which I've mentioned already and which you'll see listed in the "Call to Meet Me" paper). I think this was the first time (in '56) that it was revealed or alleged that direct threats of nuclear weapons had played a

role in ending the ^{Korean} Viet Nam war. He also referred to the effect of nuclear threats on the negotiations on Indo China in Geneva in 1954 and to the first Quemoy crisis 1954 and '55 (which I did not assign by the way in the way of readings because to this day there really isn't a lot of public information about that first Quemoy crisis or the Teichuns). But here in this article he was asserting in fact that nuclear threats had played a major role and he talked about other threats.

He goes on to describe the philosophy on which he had acted, very successfully he felt, up to this time. Always of course there has been and continues to be risk says Dulles, "You have to take chances for peace just as you may take chances in war. Some say we were brought to the verge of war. Of course we were brought to the verge of war. The ability to get to the verge without getting into the war is a necessary art. If you try to run away from it, if you are scared to go to the brink, you are lost. We have had to look it square in the face on the issue of enlarging the Korean War, on the question of getting in to the Indo China War, on the question of Formosa. We walked to the brink and we looked it in the face. We took strong action." And he goes into a good deal of detail about how these things were done.

You may remember from the first lecture here I asked how many people were aware, for example, of Eisenhower's threats in the time of Korea. Most of you—very few in this audience—now were born at that time but you had not picked up generally details of that, or even the very fact that such threats were alleged to have been made. And as I mentioned that's typical of the American public. That's also true of the other

threats mentioned. Can they really be said to have been secret threats as Julie Margolis asked me at one point. How can I speak of such a thing being a secret threat. Wouldn't it be bound to leak out? Well, this isn't properly described as a leak. This is a direct quote from the Secretary of State, asserting in some detail what he had done in 1956 just before a new election (which was in part why he was coming out with this article—to justify his tenure up till that time). And I put to the people in this audience, aren't there people here who remember this article? Do I see any hands? This is the famous Dulles brink of war article from which the word brinksmanship came. No? Come on, over there, you remember, right? The fact is it got a great deal of attention. How did it simply vanish from public memory pretty much? And why is it not part of our political awareness that at least one Secretary of State had made such threats and took pride in them? The answer is I actually want with the help of my research assistants to look up how that was handled in the press at this moment. I have to go on my memory and I would be interested in a comment by anybody. But my memory is that this article evoked nothing so much as a loud laugh and a shudder of horror at the thought that our Secretary of State was pretending that he had actually done what he had said he had done in the name of Eisenhower. Do you have a different memory, those people who remember it? Just incredulity—ridiculous—that shows what a ridiculous Secretary of State we have, he's a fantasizer, he imagines that he has been holding the world together by these alleged threats.

Another point to be mentioned here is how far he had come it seems from 1950. Yes?

Remark:

OK, how did brinksmanship become defined as what did you say?

Remark:

Good question. Why did brinksmanship come to characterize the period? My best answer, off the cuff, would be that my memory, and I would like to confirm it by looking up Reston Collins and Lipman Collins and others and newspaper comment of the time. But my memory was that it came to characterize a delusion of our Secretary of State, that this was how he conducted diplomacy, that we had a basically blustering, bluffing, Secretary of State, who could indeed get us into trouble perhaps with his bluffs. Although by the way, the notion that he made specific threats in specific crises I think was not appreciated and not part of that reaction. He did, however, talk a good deal about massive retaliation—his willingness to do so. And he was sort of regarded I think as you would regard a small boy who goes around telling people off and telling people in general where to get off—a pretentious fool. Not a reassuring person to have as your Secretary of State.

Now one thing of course that Dulles had learned (and one thing he knew that his critics did not know at the time) was our vast superiority during that period to the Soviet Union—something that was not pressed on the public's attention during any of that period during which we were building up our nuclear weapons. Yes?

Remark:

Well, that I think, if I understand you, I think another reason that this sort of bluster—that this sort of statement was taken as bluster—was that there was a general appreciation that the Soviets were either bigger than we are militarily, or on the verge of being so. For example, '56 was during the so-called bomber gap, a time when there had been great publicity that the Soviets were building more intercontinental bombers than we were. We ended up with 2,000, they ended up with 192. The implication of the public impression was that they were in the process of building more than we were. So the idea that he could seriously have made such threats or that there was any possibility that he could have been successful with them just seemed absurd.

You may remember that I've described that was my own attitude to such matters several years later in the height of the missile gap. This was '56, the missile gap began to emerge '57 and '58, a year later. So it just seemed absurd, and the idea that Eisenhower would in fact, who was regarded as a stable, affable fellow with some sense, would have allowed Dulles to conduct policy in this way seemed again, simply absurd. I remember that Murray Kempton wrote in rather a famous article in Esquire which was one of the first articles to emphasize the truth, that Eisenhower had really run policy, it had not been Dulles running policy, and that was true. And then characterized their relationship by saying that Eisenhower let Dulles say these things about nuclear threats but would no more have trusted him... that he wouldn't have trusted

Eisenhower with a stick of dynamite to blow up a fish pond, and that it was absurd to suppose that Dulles could have gone around making threats like this.

Two years later than this, '56, one prediction that Dulles had made—namely that the attacks on Quemoy had been finished forever by his treats—was invalidated because the shelling of Quemoy came up again and we'll be discussing that next time. And it was, as I've said, a serious nuclear crisis in that period, in '58. And the earlier crises were serious too. But again, when there was talk in the papers of possible use of nuclear weapons, something that's been forgotten on the whole by historians and others, but a lot of talk in the papers about possible use of nuclear weapons at the time of Quemoy.

Dean Atchison, who had been Dulles' predecessor as Secretary of State (actually he wrote this in a book called Power and Diplomacy I see a year before the '58 crisis but a year after this speech in '57), "Do any of us seriously believe that an American government would take the position that an attack on Quemoy would involve the destruction of Peiping, or Moscow, or both, and of New York? The answer is, of course, that the threat is not credible." Again, when the Berlin crisis began to emerge two years later Atchison wrote in 1959 in an article called, "Wishing Won't Hold Berlin," would the United States actually carry out its threats to carry out its NATO threats, actually, over Berlin? And he was directly quoting Dulles in asserting that we would deter such actions as a Soviet attack in Europe or elsewhere by invoking our great capacity to retaliate.

Now notice, in 1950 when Dulles first wrote about the possibility of hitting the United States, he was premature. The Soviets had no intercontinental ability to deliver attacks on the United States. In fact in 1950 we now know they had no operational weapons although they had tested a nuclear device. So they didn't yet have that capability. But by the mid 50s again they didn't have a significant capability against the U.S. but quite a large capability against Europe. By the late fifties they had a significant capability against the U.S. though very much less than ours. So the threats are being made, as I say, despite the fact that as Dulles had foreseen in 1950, prematurely, they were facing a major ability to retaliate even though much less than the United States. Would the United States then carry out our threats if the Soviet Union moved?

Dean Acheson, former Secretary of State, said, I think the answer is clearly no. "To invoke our 'great capacity to retaliate' is to insure an experience by us of the Soviet Union's great capacity to retaliate." So the point being made there is the threat is incredible. What can be done with incredible threats? A political scientist named Arthur Burns wrote this in July 1957 and you'll see how similar it is to what Jonathan Schell is writing right now. "The hydrogen bomb [much bigger than the atom bomb] has abolished the balance of power by transforming major war into mutual mass destruction." The new weapons "rule out that threat of it against which, as bank deposit, all the paper of historic diplomacy has been issued." No more credit in the bank to draw on from your military system when what you have in the bank is nuclear weapons. You

can't do anything with it. Again we come back to this point because it is simply incredible.

Now in fact I think we can say, a lot of paper has been passing around the world threatening nuclear weapons since these words were written, and that's happening today, although it certainly is true that we are talking about threats of mutual mass destruction. As I suggested at the beginning, we can conclude something is amiss in the understanding of these very intelligent and very experienced diplomats as they look at what is likely to happen, what is happening as they try to help us understand it and react to it.

Let me suggest to begin with that the notion of credible versus incredible is too rough a categorization to work with. There is a problem of conceptualizing uncertainty. We have to make finer distinctions than that, degrees of credibility in effect. On the whole neither economics nor political science nor statistics have been willing really on the whole to incorporate descriptions or uncertainty that indicate degrees of uncertainty in the person's mind. And I think that the theory has suffered a good deal from that. One other area that was explicitly addressed to the problem of conflict analytically was the theory of games, something that I found my way into in college in fact in the late forties. But that too eschews any attempt to make distinctions between degrees of credibility of threats and that is true to this day. I think it pretty well subverts its attempt thereby to understand conflict adequately. So that is an introduction to some of the concepts that I want to bring up today.

A look at a particular kind of threat situation instead of (when I first gave these lectures I really chose this as one illustration of sort of a general theory of bargaining) but this is the area that is directly relevant to this course. It is the threat of mutual mass destruction. It's interesting I see here that Arthur Burns made this reference to the threat of it which "as bank deposit all the paper of historic diplomacy has been issued," because at the time I was writing these lectures originally a set of events was taking place (mainly in New York) that fall, '58, spring of '59, which hasn't been reproduced quite as much since because of these various events. Practices in banks have changed.

But in December of 1958 a "little old lady" so described in the New York Herald Tribune pushed a note through a teller's window with this writing on it. "I have acid in a glass," the note said, "and if you don't give me what I want I'll splash it on you." He looked up, he saw about 90 customers in the bank, he saw a grey-haired lady in a brown cloth coat before the window and on his ledge a six ounce water glass with a colorless liquid in it. He returned to the note and read, "I have two men in here. I'll throw the acid in your face and somebody will get shot. Hurry! "Put all the 5's, 10's and 20's in this bag." Which he did, and she left.

Now, why do you do this? Teller's reflex? Try that reflex on your local teller and see what you get. Did he give her the money because he was certain that the glass had acid in it and that she would throw the acid at him? Unlikely, somehow. Yet he did give the money and probably the thought in his mind was it was neither credible nor incredible but there was some chance that this might have acid in it and he did not care to find out.

Another teller, just the following month met this same lady (I was following this in the newspapers at the time) One block north, the operation was identical, the note in this case said, "Put 5,000 dollars in 5, 10 and 20 dollar bills in the bag. There is acid in the glass, you wouldn't want it in your face. Don't try to warn anybody until I am out of here. Oh, yes," this was in the note, "I am being guarded by two guns." How many have seen "Take the Money and Run"? "I'm being guarded by two guns, let's not let your customers or coworkers get hurt." The newspaper account continues, "Mr. Blank's [they took his name out] first impulse when he read the note was to duck behind the counter and set off the alarm but he reconsidered when he looked up and he saw the water glass. 'She tilted it just to show me there was something in it,' he recalled later. He put his right hand up in front of his face and with his left began cramming bills into the paper bag." In this case, though he was cautious enough that with his hand over his face he handed the bag over the grille and this unusual gesture caught the attention of a vice president who was in the bank who immediately said, "Grab that woman!" He was well out of the acid reach, and the lady surrendered quietly.

It turned out that it was tap water from a cafeteria nearby that she had put in the glass. They got her then this second time, or the second time we know about. She was convicted of the two robberies. When confronted by her first victims she volunteered, "Oh, yes, that's the boy I held up last time." She was convicted without ever having given her address or, some suspected, her correct name. As for the \$3,420 from the first robbery (she was arrested on the second one) she informed the

police, "A few seconds after leaving the bank, the paper bag with the money was jostled from my hands and fell to the street. A man picked it up and tried to hand it to me but I was so nervous I said, 'It doesn't belong to me and walked on.'" So they didn't recover that money. Police described this story as "fantastic." They didn't get the money back.

The point to be illustrated here is, cannot be that she had achieved perfect certainty in the mind of the teller to what was, in fact, an invalid assertion—a false statement. She didn't have acid in the glass. Obviously I think we can assume the teller was not in fact certain that she did. The essence... Moreover, her reasons for not having acid in the glass, not throwing it at him, not having acid to throw at him, were obviously pretty strong. The key element of the situation I think was that he did not have to be very sure we can infer from this. The teller did not have to assign a very high likelihood, a high probability that she actually had acid in the glass for him to hand it over. This is related, and I'll demonstrate this I think a little more analytically in a moment. I think we can assume that it's related a little bit to what the teller was being asked to do—at least there is some evidence of this.

Eight blocks away from the First Chemical Corn Exchange Bank where this happened in which the little old lady scored, a man handed a note typed on the back of a check which said, "Have a grenade in my hand, and two more. I will use them. Didn't come here to get caught. Take a look. Toss in your and your neighbor's money. Put \$5,000 in bundled tens and twenties in a coin bag. Count it, don't stuff it. Keep quiet

until I'm out the door or this place will look like a battlefield." To this the man added verbally, "I'm not fooling." The teller told police the man was clutching something in his left hand and he "believed it was a grenade." It wasn't. The teller counted out \$5,000 from a cash supply of \$50,000 and put it in the bag. Eyeing the remaining \$45,000 the robber asked, "What about the rest?" According to the newspaper account Mr. Blank told him, "That's all you asked for, \$5,000." And he handed over the bag containing \$4,000 in twenty dollars and the rest in ten dollar bills. The man departed without further argument, passing the guard and crossing Fifth Avenue. He was not caught, actually.

Well it illustrates a point I'll be making a little more generally here that how sure you have to be on this before you will comply with a blackmailer or coercionist's request depends not just on what's being threatened but on what is being demanded of you. For \$5,000 it was not worth the risk to find out if it really was a grenade. For \$50,000 he was ready, actually, to find out if the guy was fooling.

I introduced here a notion you'll see in the article, if it takes more explanation, get it from the article, but something I called a critical risk. Namely the maximum probability (and I'll explain what I mean by probability in this case) the maximum probability that a threat will be carried out that is needed to assure... I'm sorry, before a person will resist the threat. I'll illustrate this on the board. How sure you have to be that a threat will be carried out before you give in to the threat. Below that threshold you refuse—not that this is a precise threshold—but before this rough threshold, if the probability is

less than that you might refuse the threat, in the essence of these situations (the reason I'm using the bank examples and some others) is that this threshold, this critical risk is rather low. The person doesn't have to be very sure. Other situations like that, one intuitively that this is one of them, but there are some other indications because this series of heists went on quite a bit. There is one I wanted to refer to.

The same period the little old lady was operating on Seventh Avenue a young electrical engineer held up two Chemical Corn Exchange Banks in succession. One in Penn Station, one on Broadway near 38th, with a comb. Each time he asked for \$5,000. The note in the second case advised, "Look at the gun. Don't try to signal. Don't try to press alarm. Put \$5,000 in hundreds, twenties and tens in this envelope. Keep quiet till I'm out." Which they did. The instruction to look at the gun was a nice touch since he did not have one. As the newspaper put it he said, "Look at the gun." He didn't have a gun. As the newspaper put it a comb stuck in his belt high across his chest appeared to Mr. So-And-So to be the handle of a pistol. He immediately counted out \$7,060 and thrust it into the brown manilla envelope and pushed it out. In this case the robber was caught after a chase but it turned out his three earlier comb heists had been successful.

Well we have a pattern here. First Chemical Corn Exchange Banks. Had word gotten out about the critical risks of Chemical Corn Exchange tellers? Ask for \$5,000 and you're in. Point anything at them, cookies, milk bottles, rolled newspapers... I was taking material from the papers

of the time but it said, their willingness to resist (another sense of this critical risk) seems on a par with an American POW described in a recent book on the POWs in Korea explaining why he had given information to his captors after 35 minutes of mild questioning he said, "They said they had ways of making me talk, so I talked." In terms of the analysis I am about to present I said you could explain this in a number of ways. His critical risk might have been very low (the POW) because torture had a very negative payoff for him or the information requested seemed a very small demand or he might have regarded the actual risk of punishment as very high and so that the Army's categorization of its POWs is less fine grained they decided he was "a coward." And I went on to say it is a peculiarity of thermonuclear threats that they make cowards of practically everyone. Very few are the objectives that seem worth, to anyone, a high probability of nuclear retaliation.

Let me suggest, and I don't want to spend too much time on it, but I'll suggest a conceptualization of this. A game. Let's say I could use, well, we'll use the bank example. You are the teller and you have two choices confronted by let's say the Comb Man or the Little Old Lady. One is to pay out what you are told and the other is to resist. Ring the bell, ring the alarm, shout for help or whatever. Whose money is it? Yeah, obviously it makes a difference. By the way this particular series of bank robberies is what led to a great reexamination of bank security and to a lot of new practices which we can examine with this theory of threats. That's... the question you raise is a fairly important one. Let's say that to some extent the person's bonuses are reflected by

whether he pays or not (in those days which was more likely to be the case). So that if he pays he loses something. Let's say he gets docked 10% of what he has paid out so he would lose \$500. If he resists, then he doesn't get that, maybe he gets a reward, let's say. So we'll give him, what do banks do you think give tellers, \$10, \$100? Who he works, for, right?

Now, those are of course not the only possible outcomes of these two strategies that he's interested in. If he resists he's been told that acid will be thrown in his face, a grenade will go off, let's say, let's look at the grenade case. That's particularly interesting. So the grenade will go off, killing him, presumably. So he, you know, whatever that means to him. But we'll say, death. Just that. It means lots of things, there's insurance, he doesn't get to go, you know, to the World Series, all these things that are involved. For this purpose, by the way, you'll notice... (How many people are economists and have heard the expression VonNoiman Morgenstern Utilities (?). How about that. OK. Well for esthetic purposes this is best conducted with VonNoiman Morgenstern Utilities. I'm not going to do that. I'll just talk about the actual more or less objective outcomes that are likely and not try to represent his evaluation of those more abstractly. Fairly obviously if he were to give an order of preferences to these things, this would be the best outcome, this would be next best, presumably this would be worst.

Now, if threats were simply credible or incredible, if to be effective, they had to be credible and these threats were effective, then we could assume that he's really only looking at two outcomes. He has a

choice that the Grenade Man has given him between death and minus 500. He has to decide which of those he prefers. But actually, fairly obviously, that is not the only thing he was looking at because the idea that he was certain that this man... that the comb was a gun, that the grenade was a real grenade that would go off, that the water was really acid is not the case, you know, and pretty much out of the question for reasons we'll give in a minute.

So he does have to look at these two possibilities. He assumes that if he pays the threat will not be carried out. That is a good assumption. He pretty well assumes that. So you'll notice I give a slightly different representation of this in some of the lectures that I wrote, but for this purpose I'm just going to assume that there is one outcome then under this possibility, this strategy, and two possible outcomes under this. He may do the best or he may do the worst under this. A first suggestion that I'm making is that all three of these elements are relevant to what he is likely to do and several others in addition.

Without making it too complicated what he will choose to do will depend to some degree on all of these things. First of all, if this seems highly likely in some sense which I'll define in a moment, then it's very plausible that he will choose this—that he will give it—if he thinks that death is the alternative. We are talking about a teller now not about a kamikaze pilot. If on the other hand, as we saw, if on the other hand this is sufficiently big, let's say putting out \$50,000... \$5,000 dollars he loses \$500 we saw a teller actually resisting the demand, with the guy right in front of him.

He would give him the money if the most he would lose, let's say, is 10 percent of \$5,000, but he would not give the money if he was going to lose \$5,000 out of it. Right? That's the implication. He must have been counting on the fact that this was very less than certain. This outcome was less than certain or he could not have made such a choice because even for \$5,000 presumably a high likelihood of death would knock that out.

This is the characteristic situation that I'm going to analogize to the nuclear case but it exists as we can see in other circumstances as well. He doesn't have to be very sure that the threat will be carried out before he chooses this instead. So what I described as a critical risk is not very high.

Let me now suggest, again, not spending too much time on it, what it may mean to talk about degrees of likelihood or probabilities. In a lot of your courses to this day, a little less than, the kind of concept that I'm about to present is now, there is a literature on it, in particular in the field of Bayesian statistics, subjective probability—the work of L.J. Savage and his book The Foundations of Probability building on the work of a man named Bruno DeFinetti and other work by Lord Kane in this particular area, a handful of people in the twenties and thirties but evolved a good deal about the time that I was working on this in the late fifties. To make meaningful the notion of degrees of personal probability or subjective uncertainty measuring, describing, to some degree predicting the relative likelihoods and the meaning of attaching different degrees of relative likelihood to events, including single

events. Events that perhaps have never occurred, and if they do occur, will only occur once, like your own death, your marriage, a thermonuclear war, various singular events that have not yet occurred.

There is a wide literature over the last couple of hundred years that not only proceeds without such a notion that probabilities or degrees of likelihood can be assigned to such events meaningfully, but asserts that there can be no such meaning. I'm sorry, I mentioned DeFinetti but the man I meant to mention was an English mathematician and philosopher named Frank Ramsey who was a contemporary of Lord Kane in Cambridge, DeFinetti is another one who also worked on this.

CHANGE TAPE SIDE

Ramsey's point was that the degree of belief that you have in a proposition or an event is related to your willingness to act on the truth of that proposition. And specifically it is related to the kind of belief you have that leads you to assign or accept certain betting odds on that proposition.

A belief then that a proposition or an event is let's say equally likely to be true, or equally likely to occur as not, 50-50, a probability of one half he said is related to the kind of state of mind that you have about such a proposition that leads you to be equally willing to stake a given amount of money either for or against that event. Meaning this: Is it going to be foggy tomorrow in the Bay Area? Fog in the Bay Area. And this is not fog. No fog. He says, what could

it mean to say that I regard fog as about 50 percent likely—fog tomorrow. Now everybody knows what it would mean to say fog has a 50 percent chance... there is a 50 percent chance of fog in the Bay Area, which you'll hear. You hear that increasingly in weather forecasts though you didn't used to hear probabilistic statements like that. But that's related to a long history of mornings, of measurements of fog and so forth and a statement that at this time of year under certain conditions about 50 percent of the time there will be fog let's say. But what could it mean to say, "I believe it's 50 percent likely that there will be fog tomorrow." That's a single event.

And Ramsey's insight was to say, that means that I would be roughly indifferent between betting on fog and betting against it. Let's say this is one dollar. Small amount of money. Here are two different actions. This is decision theory formulation. The row now represent actions with possible consequences depending on whether there is fog or not fog. Just think of them as bets. This is a bet then on fog tomorrow. It pays off if there is fog tomorrow. It pays off if there is fog tomorrow. It pays you one dollar. You get nothing, it's a nice bet, it could be -1 but we'll just say zero. You get nothing if there is no fog. This is a bet against fog. You get nothing if there is fog, you get a dollar if there is fog.

If you were roughly indifferent between those, you'll take either of those, you don't care, Ramsey says, we'll say then that you regard fog as likely as not—50 percent. That's the meaning of the 50 percent likelihood or probability, a personal probability. Somebody else for

different reasons may decide, absolutely not, that's crazy. I would much prefer this. There was fog yesterday, I happen to know there was fog yesterday, fog the day before. Fog is predicted for this. I would much rather bet on fog. This may be information that the first person is simply ignorant of. So that person then would prefer this, meaning that he regards it in Ramsey's terms as more likely than not. That doesn't tell you precisely what probability he would assign if at all, but it does say that the probability is greater than one half. That is the meaning of saying that. Which one is right? In this framework there is no meaning to that statement actually as to which one is right. We are simply measuring what these people believe. And they may both be way off basically. We're just measuring in other words, the consistency of a person's belief.

Supposing the person who thinks that the fog is greater than one half would find himself indifferent, just for convenience, between this kind of a bet. Let's say that we are going to draw cards from a shuffled deck and the payoff. OK. These are now bets, simply, one, two, three, four, on whether you will draw from this shuffled deck which you shuffled yourself a heart, a spade, a club or a diamond. And imagine, as I say, just for convenience here, that the person who would rather bet on fog finds that he would in fact rather take one of these bets, any one of them in fact. He thinks his probability would be greater than one half. Supposing that he would rather bet on (I'm going to change the bets here). Here's a bet that pays off if you get anything but a diamond. He finds that he would rather stake the dollar on this bet. How would we represent his subjective probability?

I'll call on you. Yeah. No, of fog? The fog of betting here. He would rather bet on this than on fog. What does this tell us about the probability of fog in his mind? What's a number? OK. Now, by the way, I should have tested something first because we are not talking objective probabilities. I remember now why I wrote it this way in the first place. I meant to suggest that we did a little experiment with this guy to see whether he thinks the deck is shuffled right and... Is he in fact indifferent between these? And let's suppose that we find he is indifferent, OK? We might find that he prefers the bet here and we could ask him, "You mean you think hearts are more likely?" He could say one of several things. He could say, "In my experience I draw hearts," you know, some people always bet on heads. Or he could say, "I found I got hearts the last three times," or "I got diamonds," he's been betting on roulette or something like this. "I've gotten these other things a dozen times, I think it's time to come up hearts." He might say that. He's acting as if he regards hearts as more likely. He might just say, "I like hearts, I like to bet better on hearts." We have to scratch him from our experiment basically because he may not produce a consistent set of probabilities, at least with these bets. But supposing he is indifferent between these, OK? And he's also indifferent between (I'll give some other examples) between this and this say. He's indifferent between those two, OK? He acts as if he assigns equal probabilities to those.

And as Savage showed and Ramsey first showed, if he follows certain consistency axioms which are very widely adhered to or believed

generally, you should be able to find bets where you could assign probabilities to certain events with some meaning. And the meaning would be simply this, that he does assign these kinds of probabilities. He regards these as equal, he regards these as equal, and so they add, they combine in a certain way, and he acts as if he assigns probabilities. Don't worry about being able to do this precisely in many cases, just in some cases he can. A lot of people act as if they assign 50-50 probability to heads or tails. So in this case we've got these probabilities. If then it turns out that he would prefer to bet on fog than to bet on this which we can now give the probability of one fourth to each of these, so if his question then of $1/4$, $1/4$, I'll entertain some questions but I'd prefer that you... you can live without it but it may be helpful if it's not unclear. Say then that he does find that he prefers this bet to this bet, and as a lot of you said then, and I've now explained what I mean by that, he's assigning in this sense, a probability between $1/2$ and $3/4$. Let's say that he finds it indifferent between fog and this bet. Voila! We have a precise probability for fog for him, we've hit on one, $3/4$.

And in theory by comparing his bets on this singular event which could be getting an A in this particular quiz, forinstance to certain standardized events to which we can assign numerical probabilities, in principle you can make that probability fairly precise and mean something by it. The important thing is not that it means something very precise, what is useful is, I think, that by thinking in these terms of betting probabilities or odds, 3-1, 2-1, 50-50, you can not only... you can make

distinctions between situations that are very probable and situations that are not very probable. And you no longer are bound in this categorization of the threat is believable, it is not believable, you can say with some meaning, this particular threat is quite probable, very probable or about 50-50, as likely as not, that's a rather common judgment, or much less likely than not, very improbable without being zero. Anybody feeling very unhappy so far at this? Want to ask any...?

Q:

Let's see what happens here, put it in to the matrix. He doesn't here get zero, he gets death. This is the queen of diamonds he draws, right? And I think we can assume, this would give him a one quarter chance of death by these earlier things, right? Now what's your question? Will he generally prefer to bet on that?

MORE Q:

Oh, well, look, to make the two comparable you would have to change this. Very simple, you see our little thing accommodates this very nicely. Which would you rather stake your life on, fog or ? You have to make the payoffs the same in other words to make the two things comparable, follow? So it works perfectly well on this thing. He would rather not bet with his life at stake, presumably. But let's say sometimes you don't have a choice. You know, the lady or the tiger, and

you know, "Ve haff vays of making you talk," and so forth. "Draw a card!" And if you draw the wrong card, too bad. So which would you rather, you know, stake the card on, which would you rather stake your death on, hearts, diamonds and whatnot. You can still make the choices if you have to. And you can still say meaningfully, in this case, with the odds as they are, he could perhaps make a choice if he's not paralyzed you know and incoherent and he's able to make a choice.

There is a nice point that that raises, by the way. The analysis that I'm talking about is, in the first instance, the assumption of coercion does assume that the person or institution to be influenced is capable of rational choice in a very restricted sense. Capable really of choice to begin with. Of making a choice. If the very prospect (remember in The Deerhunter, the Russian roulette game for example) if the very prospect of having to decide which gun to pick to play the Russian roulette with makes you simply paralyzed, as it well might, that person cannot be coerced by this particular choice.

The definition in legal dictionaries of blackmail or extortion looks at first sight rather peculiar. It is the gaining of an advantage, usually they say a property advantage, but gaining of property with consent by wrongful use of threats of I think it says violence or harm, damage, various things, what is the meaning of consent in this case? The person who is being blackmailed, the person who is subject to extortion does not on the whole think of themselves as acting with consent here.

The distinction that's being made is between a situation where the person in some sense is able to calculate the consequences of various

acts and to make a choice as opposed to, in the law now, the situation where I actually have a loaded gun, I point it to your head directly and say, "Your money or your life. Give me your wallet right now." That is not regarded as blackmail or extortion. It's regarded interestingly as assault. Legally speaking (I'm a layman on this but I informed myself for the purposes of this analysis—legal dictionary) legally speaking this situation is regarded in the eyes of the law as having deprived this person of the capacity for rational choice. He has no choice. He may or may not give, he may be gibbering, he may collapse to the ground or whatever or he may give, but for legal purposes he is not seen as having a choice. And in that respect it's as if I had bound his arms behind him, taken the money from him, hit him over the head.

Legally, there is no real distinction between those. Of course if you actually hurt the person it's called aggravated assault—if you actually shoot him, if you actually hit him on the head. But it's already an assault if you make the threat so terrifyingly, with such intimidation that the person is regarded as having no real choice. The distinction then is between doing that or on the other hand giving the person a note which says, "If you don't give me what I want" (this happens with banks quite a bit actually by the way) "your children have been kidnapped from school and are now hostages of mine. Your wife will be killed, your house will be blown up." That's regarded as also criminal by the way and not less serious but a different category of crime. It's extortion, it's blackmail which is what I'm talking about here mainly. It's not directly assault because the person is regarded still as having

some time within which to operate, he's not so intimidated by that immediate prospect of physical harm to himself if he is incapable of making a decision. I'm going on about this because these are distinctions which will be of some importance as we go along.

The first thing to say here then is that actually... of course strictly speaking many of the cases I was giving could be called, would be called, assault because it was an immediate threat of bodily harm. For the purposes of my discussion let me ignore that distinction at the moment. And we are assuming then that we have a situation where it's a little unreal for the bank robbery cases, where the person being threatened, or the institution being threatened, does have a choice—can calculate, can decide what to do and makes that choice—feels himself or herself as having alternatives. That's a major aspect of what we mean by rational choice. We don't mean that the person has to be very reasonable. The values they assign—their objectives, the choice they make—may seem very foolish or very unreasonable but if it's consistent for that person—if it's predictable, if it involves some reflection and calculation—it fits this model of choice that we are talking about.

OK. Without then assigning definite probabilities (which I'm not going to bother to do from now on) I just wanted to suggest that some meaning could be assigned to the notion of probabilities in this situation, and of probabilities being greater or less and very small or very large, that's about all I need on the whole. Fairly rough categorization, but still it's more than just saying credible or incredible.

We come back to the bank robbery situation and say this being the nature of the situation where the acid for instance isn't death, it's just disfiguration, right, a little less. In either case I suggested if the person assigns even a small probability to this he's likely to give in unless this is very, very bad. Let's say this was \$5,000. A lot of people could be heroes, at least for a little while, for \$5,000. And it might take a higher probability. They'd have to be more sure that the threat would be carried out than they would have had it in this case.

So this threshold critical risk then is a property of the entire set of payoffs here. Change any of these, for example, make this a \$1,000 reward, a \$10,000 reward, at some point some people are going to say, "No, you can't have it," and they press the button, right? You've changed basically the structure of the payoffs here. There is a way of calculating this to make it look simple at least, it's in the papers. Depends on all of those. And it depends on something else.

Say the teller says to himself, "I don't have to be very sure." My framework that I've suggested here suggests that he then calculates. Having calculated his critical risk in this very rough way, not that it's 15 percent or 12 percent, but that it's small, he then asks himself another question: "How likely is it that the person will carry out the threat? What is the probability let's say, p , roughly, that I should assign?" And he compares that to this outcome. And he compares it to this threshold figure. "I don't have to be very sure. How sure am I?" He makes a comparison of that nature.

Now, another aspect of the situations I'm interested in and the course as a whole and which the bank robbery case illustrates pretty

well, is that it is peculiarly hard for the threatener to make his threat look very credible at all, even slightly credible. In all cases of coercion, I shouldn't say in all, but typically, in cases of coercion, this is the obstacle for the threatener. It may hard for him to make it certain or very probable and in some cases even at all probable that he'll carry out the threat because if he were to do so he himself, she herself, the Little Old Lady, would suffer. It's not what she would want to do under the circumstances. In fact, specifically, with the Little Old Lady for example, if she had real acid in there, if she did carry out the threat, it would not only be assault (which she gets even if it's water because the assault is in the intimidation, whether the gun is loaded, whether the acid or not) but if it was really acid and she threw it at him it would be aggravated assault and the prison sentence would be much higher. It would be very big.

How do you arrive at some sense of what the probability is? One aspect of that is an estimate of what the blackmailer's payoffs are. And here's where the problems can arise for the blackmailer. I'll put them in next to this here. If the teller resists and the lady (go back to our...) if the Little Old Lady accepts that and walks out, let's say, I'm sorry, if he pays he gets minus \$5,000, if she gives him \$50,000, she gets \$50,000, actually if she was asking \$5,000 let's keep it next to... OK? That's her payoff—\$5,000 plus. He gets minus \$500. In none of this analysis will I be comparing these amounts.

If the teller resists he gets his \$100 bonus, and she gets zero if she accepts—she walks out. If she throws the acid and it is acid he

gets death or disfiguration, she gets a serious jail sentence. If she killed him she could get let's say, death, herself, to make it more interesting. She gets death. If then he refuses her threat because, let us say, she has set her price too high, she asked for \$5,000, she asked for \$50,000 she should have asked perhaps for \$50 and she would have gotten it, maybe not, we'll come back to that. But he has resisted. Under these circumstances what concerns her are her payoffs. She now has two choices. She moves second in this game. She can either walk out and get zero or she can do it and get death. That is her problem.

Typically even if this is not death, typically, if a threat fails to be effective, the threatener is in the position that it is less preferable, it is worse to carry out the threat than not to carry out the threat. The threat is damaging—self damaging. And in these particular threats it is a mutual destruction—very damaging. One could say just as damaging for the threatener as for the victim. But that is not a comparison that I will try to make meaningful or will rely on. The important thing... you don't need it, it turns out. The important thing to be able to say is it is very bad to carry out the threat. And that means that she has a credibility problem on this. That's the problem of credibility here.

Typically the blackmailer's payoffs are what make it difficult, what create a problem of coercion, what makes it the case that coercion cannot count on being successful. It's why coercion fails when it does fail. Because the person has not managed to make the threat sufficiently credible. And a major reason why that happens is that it would in fact

be costly or self-destructive to carry out the threat. Again, some of this may seem self-evident, or it may all seem self-evident when I say it. I just want to make the point. It is contradictory to these simple statements that I was quoting by Atchison or Dulles in 1950 or Burns or Schell and so forth. And they are not fools. They are very smart people. I think they are in many cases burdened with a conceptualization of this problem which is simply inadequate and leads them astray. Yeah?

Q:

Good. OK. Exactly. Very good. The peculiar aspect of these situations that I'm focussing on here is that an appearance of rationality or rational choice by the threatener is a very strong disadvantage. I'm talking about situations which arise very much in war (but not only in war, a fair number of peacetime situations) where a threat is made that is very hard to make at all credible by a person who looks reasonable—normal. You can infer their payoffs.

And you can see that the teller can say (as he would say) "If I were standing in front of that window passing the note, I wouldn't have acid in the glass." Nevertheless he gives the money. Right? What is he inferring? I think he is saying to himself, "I wouldn't be standing in front of that window. This person is not quite like me, somehow. The very fact that this amazing thing is happening right now suggests that I should be wary of inferring her payoffs from my payoffs if I put myself in her place." You know there's somebody funny out there.

That doesn't mean that the mere act is enough to do it. If you look enough like a schlemiel—like Woody Allen. Those of you who have seen "Take the Money and Run" (his first movie actually) he embarks on a life of crime for which it turns out he is not suited. Of course if you follow Woody Allen movies he goes from one metier to another. He has yet to find the profession to which he is actually suited with his persona. But his bank robber phase (which was his first movie) is one of his least successful, and when he hands the note to the teller the teller says, "Look at my gub?" And Woody Allen says, "No, that says gun." And the teller says, "No, no, look, clearly it said G-U-B." "No, no, that's just my writing, it's..." "Come on, come on," and he asks the next teller, over there, "Bring the next teller over," he says. "What does this note say?" "Look at this gub." Woody Allen says, "No, no, it's not a gub." And they take him in to the Vice President's office and there's just an entire discussion of this matter. And somehow Woody Allen has not conveyed the point that the salient aspect of this situation is that he is about to kill the teller. That has just not gotten through persuasively. They are much more interested in "What exactly are you trying to tell us?" you know and, "Why is this going..." And he ends up in jail. In short, Woody Allen does not get away with it. And most of you probably should not take up a life crime with a glass of water unless you let your hair grow a good deal more than I see in this particular group.

In the sixties Bank of America put up a lot of iron grilles against people no older than you. But they've just taken them down in Berkeley.

The barrier has been taken down in Berkeley from the Bank of America. So you would have to look like something other than a student to hold up a Bank of America I infer from this. With this technique. You'd have to have real gun, fire a few shots and so forth.

Can such methods work? Yes they can work if you don't look like a bank teller. After all the bank teller himself in theory could use the same technique to deter this kind of thing. You could, in response to all this thing, furnish bank tellers with hand grenades and give them the instruction, see to act as follows. Somebody comes in with a gun, a note to bag and the teller is to lift the grenade, pull the pin thoughtfully and say, "Turn yourself in." And the trouble is, would that work?

Well it might work, but not reliably, because the person now who would come into the bank would be calculating, "What kind of person becomes a bank teller? After all it's a job that consists mainly of making change and resisting temptations to embezzle. Is this really the sort of person to let that grenade fly or not?" You know, and they might take a chance.

If you can appear irrational, erratic, impulsive, if your appearance is such, if your manner is such as to suggest that you can't be counted on to assign the same values that a normal person would assign to these you have a better chance. A better chance of making the teller or the person being threatened believe that there is some likelihood that you will carry out this suicidal threat.

Which is to say that (as the phrase has been used) irrationality can be rational—can be chosen in the sense that it can work. To appear

irrational in the sense of feeling driven—not choosing—a fanatic follower. For example, what is the fear right now of Iranian "kamikaze" pilots attacking one of our ships? Allegedly being trained (our government has said) by ??? due our ships off Lebanon. Not the belief that these people are by their nature, you know, incapable of rational choice, but they could well act in a way that does not reflect a choice situation—a decision problem. They can simply act. Do what they are told.

And actually in a lot of situations people do what they are told. Certain kinds of bureaucrats can look very self-sacrificing; namely, members of a military hierarchy, appropriately trained. People like you in fact. The Army, the Marines, would undertake, not to change your whole values or whatever, but to change your ability to obey orders, your willingness to obey orders, even in a suicidal situation. And would be willing to put you in situations.

The people in Lebanon are not older than you are right now. The Marines, in Lebanon who are over there. And the notion that they might in fact carry out orders to sit under heavy fire without firing back and accept this, for example, doesn't reflect the fact that they've become madmen or are wildly erratic or anything like that; or that they are crazy by the standards of the Marine Corps, but simply that they can be counted on to do what they are asked to do by this spirit.

Is that irrational? Not in that situation. Not for a Marine. But it does depart from a notion of rational behavior. That person is no longer coercible. They are not choosing. Depending on how it comes out

for them, or how they evaluate the outcomes they are doing what they are told. Are people capable of doing that on rather a wide scale? Yes. In fact one way of getting, in effect, mad behavior is to (in this sense) is to bureaucratize it. Which simply takes it outside the scheme to a large extent, of rational choice.

This has been very little noticed in political science or social science which seems quite willing to apply models of rational decision making to hierarchical behavior under authority. In fact, as anyone knows who's been in a hierarchy, especially a highly disciplined hierarchy (whether it's a union, a corporation, a priesthood, a political party conceivably, or an army) the rational behavior mode is really quite misleading in that case. Something I've noticed rather recently actually. What people are doing is not necessarily weighing alternatives except to the extent that they are told to weigh alternatives. And if they are not told to weigh alternatives, if they are told this is what you are to do, that is what they do. They are reacting to authority. You get this kind of behavior and you know of course the military situations we're talking about, that's what you count on particularly.

To the extent you can look then... But there are other ways of appearing unpredictable in this sense. One is to have, as I say, unusual payoffs—to convince someone that death, for you, (I have cancer, I'm very old, I want to die in these kinds of circumstances) you look suicidal in effect. That affects the person's reading of your payoffs. They are not normal any more.

Back to a question that was raised earlier. I think it was implicit in the question that was raised about putting death in here. Putting

death or whatever into this betting situation where you are betting as they say in the trade, betting against nature. The draw of the card, fog or not fog. You can change the payoffs and it should not affect the likelihood of one of these.

If you introduce the notion of probabilities or uncertainties into an analysis of conflict between people you get a peculiar effect that is not, I think, found. It is very realistic. It describes something really in reality but it's not found in any conceptualization of the bargaining problem that I've run across except mine. And that is that when you change the payoff you change the likelihoods of the other person's action. And the reason is that if you change any of these payoffs (let's say that to start with I change this payoff, or that payoff, as a threatener) I change the payoff to me. I change your understanding of what I'm likely to do and that changes what you're likely to do. Right? So I change this for me and your appreciation of my probabilities changes, thereby my appreciation of your probabilities changes. You get that affect.

You don't find that in game theory because they don't have probabilities. In fact it is a very important thing to have in the analysis. It's a defect in the current analysis. OK?

Q:

True. All these things can happen. I don't know if you followed that. I'm not going to repeat it exactly. You can think of all these

probabilities. I really presented this in a very rough form and a very simple form. If you play with it (and I urge you to do that), apply it to bargaining situations. Tom Schelling (by the way I should have mentioned, is a key person in the bargaining side of this analysis) showed the analogy as he said between tacit bargaining with passing in a car—the right of way in a car—weaving in and out, convincing somebody that they had better get over to the right because you intend to pass them; bargaining with your children. Which I am now experiencing in very elaborate form. I have a six-year-old and I could apply this to a number of examples with a six-year-old—trying to get him to do something or else..., or if..., you know. Not easy, not easy. Six-year-olds, mine anyway, tend to be winners at this sort of thing. And war—war situations. (I'll take a break in a minute.)

But Schelling's point (Schelling, by the way, in his first essay on bargaining which I did assign, is a brilliant breakthrough in bargaining) analyzed a great deal of this in much the terms that I have without, however, any of this formalization which he later came to. The papers that I wrote were in part an attempt to formalize in game theory terms what Schelling was saying without this analysis. Also he didn't have a clear conceptualization of the differences in probabilities. In fact to this day has never done this completely and I think it is something of a limitation on his analysis. But he did very much point to this problem of achieving credibility for your threat. And he talked a great deal about commitment and the way you could make somebody believe that you would carry out the threat.

That is the key problem. If you want to understand a great deal of political behavior in the world today it is best understood as people going through various tactics—maneuvers, performances—in order to make threats more credible, in order to commit themselves and to say "I will carry out this threat even though it appears to be against my interest to do so." With this kind of situation by the way, the usual tactics are rather difficult because the consequence for the threatener (and remember always in the back here, the basic analogy is to nuclear war) the consequence to the threatener is very, very bad. Hard to make it look otherwise.

In more normal threat situations, even in war, you can do things like... let me say... you were saying supposing the person could get away, say had a good chance of getting away. Well, that changes that payoff. You can make it look (try to imply) that you have a very good getaway tactic. It ain't gonna be death for you. The grenade is going to kill me but I have a (grenade isn't too good here) but I have a bulletproof vest on. I have a good getaway. As she said, "I have men in here. If you don't hand me this stuff I'm going to get out whatever I do. I have other men to...." She is in effect changing this payoff and making it look better, and thereby more likely that she will carry it out. It may not be as good as this but it's not as bad as that. So she can raise this. Or (and this is the thing that Schelling analyzed in great detail) or she can do something that is very little analyzed and understood in most political analysis or game theory. Another way that she can deal with this death thing is to arrange it that this outcome

becomes very bad for her. Change this one. By lowering this payoff she can perhaps not make it as bad as death, but let's say as bad as jail. Let's say jail is what she is worried about. Imagine that she does something here that will make it actually... that this will become minus 1,000 for her.

Well, how does the Mafia make people believe that if they do not pay up on their loan shark loans at 100 percent interest rate or 200 percent interest rate, their legs will be broken. This is a standard way. Why do you need this kind of threat? Because with that kind of loan (which is illegal) the loan shark cannot go to the courts to get his money back. In fact, if he did make a fuss or use any public method of getting it he's risking jail for loan sharking. So he threatens to have someone break your leg.

If this actually is done, I presume you're aware of this. This is the way loan sharking does work. For a certain loan fingers, a leg, two legs, we manipulate this down here depending on the scale. On the other hand, if he does carry out the leg presumably he is breaking the leg, he's risking jail if he does do it. That's against the law. That's an assault. Well, the Mafia doesn't have a whole lot of trouble on this because they can convincingly convey that they won't go to jail. They own the court, they've bought this and... How about somebody else who isn't as well organized, doesn't have the same connection? If they are working the same stand as a loan shark, let's say, repeatedly, "I've gotta break your leg because if I don't carry out that threat I'm out of business, people will understand that they don't have to pay me back. Say you're a bookie, something like this. Honor is

CHANGE TAPES

credibility of threat, that bank deposit thing. I'm a man of honor. That's the expression used by the Mafia, it's been the title of some Mafia biographies. A man of honor is a man who can be guaranteed to do two things. To carry out his threats—specifically to avenge slights to his family or to the Mafia or whatnot and to make threats and carry them out. And to be obedient. That's another aspect of a man of honor, which means, by the way, and if you are not obedient in the Mafia you'll get killed so that makes it easier to be a man of honor in that respect.

But if you are dealing with a man of honor then you have a couple of choices. You can give the leg breaking detail to what is known in the Mafia as a "soldier." To a low level trooper who may actually be chosen to be someone who enjoys breaking legs. So his personal payoff... he'd even be willing to go to jail to be able to break legs now and then. It's nice work, it's in the open. But he doesn't have to be because the other reason that he breaks your leg, even if he doesn't like it, he hates it, is that he would be killed if he didn't. And he has a proven record of being very obedient. So he doesn't even think of disobeying.

By delegating the job to someone who is obedient, by bureaucratizing them which is what the Mafia is, a bureaucracy, by bureaucratizing it you put that dirty, dangerous job in the hands of someone who doesn't act rationally he just what he's told. And if he is at all rational about it and considers disobeying, there will be the rational consideration for him that he will suffer if he doesn't as a subordinate. So you make it

plausible that you will carry out the threat. You delegate it, you stake your honor.

And why do you do that? You say, in order to operate we have to be believed, we have to be credible. This is what various presidents, Nixon, Reagan and various others, really all of them at one time or another, have told us. The meaning of standing tall, being believed, being respected. And I'm not making fun of this, I'm merely giving content in a framework. It means having our threats believed and thereby effective to a very large extent. It could mean having our symphonies admired, having our Bill of Rights admired, but usually in the context they are talking about that isn't what it does mean.

It means when we're humiliated we will avenge it. When we say we will carry out something we will do it. We will not be found bluffing. If you have that motive to be believed (because that's what your power consists of) you now have something that can be staked. The Little Old Lady could say, "I'd hate to throw this acid, but if you've been reading the papers, this is my form of living. I've just knocked over 18 Chemical Corn Exchanges. And I guarantee to you that if I were found bluffing, I would be out of business. If then you resisted and I didn't throw the acid, my career is gone. I might not go to jail but I have lost my credibility. I have lost my honor. That's worse to me than going to jail in this instance."

Notice she did go to jail actually in one instance. She did not give up her money from the earlier one. And who is to say that she is not out there somewhere operating with less publicity because. Well, she was

found actually bluffing, in fact, that was bad for her. Analytically we are just saying it can be a smart move to tie your hands to make it impossible not to carry this out if there is some way of doing it or actually to lower some of your payoffs. To lower your own payoffs in certain cases.

And say, as for example you'll see Chiang Kai Check made it plausible that he would defend the Island of Quemoy by putting one third of his army on the Island of Quemoy where it could quite easily be captured a few miles off mainland China. He could say Quemoy, by itself, is hardly worth a war to me. How can I make you believe that I will in fact launch a war or bring my ally into a war if you attack? By putting one third of his army there he made the loss of Quemoy catastrophic for him. He would then have found it extremely hard to defend the main island of Taiwan—Formosa. He said, "It has become very important for me." By putting troops in a particular area you may have no prospect of winning with those troops, but you may have made it very costly to loose.

When we say actually that the Rapid Deployment Force acts as a trip wire that obviously is not because it becomes automatic that if they are fired on they fire back with nuclear weapons. They might not have nuclear weapons. And it might seem what you have done is say, "I have put troops there where I have a lot to loose. If I allow those troops to be overrun, if I allow them to be beaten, or captured, or defeated, my honor—meaning not just my pride (often the word honor is simply misunderstood by even fairly sophisticated people). And they say "What is this honor. Are you kidding? Prestige, face, is that what this is

about?" And the people who assert that we must maintain our face, credibility, prestige, can mean a number of things by that. But they have something else in mind usually. And one of them is we are a big power that operates in the world and protects our interests with the threat of force a great deal. And if we do not carry out... if we allow threats to be found to be bluffs, or if we allow ourselves to be defeated and give up and don't escalate—don't back it up—we will have less influence. We will not any longer be able to protect our far-flung interests in this manner. There are, in other words, perceived to be major interests at stake.

To go right back to the example we started from. The notion in '57 that Quemoy could not be defended with nuclear threats by Dean Acheson as qualified to make the judgment as Foster Dulles, was wrong. It was defended by nuclear threats the next year. Not because it was perfectly credible we would go to nuclear war (in fact you will see there was an odd very strong irony and not unique one about the Quemoy situation when I talk about it next week). As Mort Halperin brings out, Eisenhower was almost surely willing to go to nuclear war. Everyone in the government believed that it was better to go to nuclear war than to let Quemoy be lost—suffer that loss, that humiliation, and so forth.

That was known to almost nobody in the American public. They did not say that. They did not make it clear. They often implied really quite the opposite. And the reason was, not because they wanted to keep the Communists guessing, but because the American people would have been horrified (on the whole) at that risk being run. Supposing the threat

doesn't work. They didn't want to go to nuclear war over Quemoy. You were on the way to being in one of the worst possible situations. The situation where we were willing to carry out the threat and the enemy might not have believed it because you weren't able to make it very clear. For these reasons, if you are following me.

But the fact was why did the threat succeed anyway? Not because the Chinese were certain that it would be carried out, but because they thought it credible enough. And it was pretty credible as a matter of fact as I'm saying. And Atchison was wrong about that as were these other people. That's why the threats are made, because they can work. They can also fail. Notice that the people that I'm talking about in the bank robberies were successful a number of times until they lost—and failed (and went to jail in many cases). So experience shows that it can work and it can also fail.

We haven't yet had the nuclear war. It's certainly not mistaken to suppose that this process is in fact risky. In fact highly risky. My judgment, and I've made no secret of it, is that it's catastrophically risky. But at the same point not because it is certain to fail or because it can't work. If I'm going through this analysis and I'll... [let's take a seven minute break, give you a little break and then have a final half hour of some illustration of this. I'd like to give a few illustrations from Hitler who is the great master of blackmail but... OK let's do that, till 9:30.]

BREAK

The lectures which you'll find on reserve were only to a minor degree about bank robbers in fact I emphasized that tonight. They were largely about (as substantive material) Hitler's threats in the 30s. And that was because I sensed that a situation had arisen not in which Hitler had reappeared in the world in the 1950s but in which conceivably circumstances were such that the existence of nuclear weapons there were incentives for a person who was mad in the way Hitler was perceived as being to emerge. There were things that could only be done by such a person with nuclear weapons but with the right person or the right approach these things, these threats, could be effective.

In fact it was after I had delivered the corresponding lecture here that Nikita Khrushchev made this statement to Averill Harriman in the presence of his generals (Khrushchev's generals in Moscow) relating to Berlin. "Your generals talk of maintaining your position in Berlin with force. That is bluff. If you send in tanks they will burn, and make no mistake about it. If you want war, you can have it, but remember that it will be your war. Our rockets will fly automatically." He said that on June 23rd, 1959. I had just arrived at the Rand Corporation having given these lectures, the one I just described to you, "The Theory and Practice of Blackmail" in March of 1959. So for some six months before that I had been reading in particular Hitler's words. And that statement sounded very familiar to me and extremely ominous. And it was taken as such at the time.

Incidentally Harriman records that when Khrushchev said this the generals "in the room echoed his words ^{Al} automatically." Automatically.

You may recall that word from Herman Kahn's Doomsday Machine. A concept that was unveiled to the world by the way in 1959, the same year as that. Not rationally, automatically. We have committed ourselves to an automatic flight of nuclear missiles.

At that time (perhaps the height of the missile gap) estimates in American intelligence were that the threat had to be taken quite seriously by those who believed the estimates such as myself. And I had spent the previous summer at the Rand Corporation reading those estimates. Khrushchev had zero ICBMs at that time. So the rockets that would fly automatically could not be ICBMs. We did not know that. That was a bluff. He did have plenty of MRBMs, IRBMs. Reasonable to suppose that those rockets would have flown automatically? No. With no ICBMs, facing 3,000 U.S. bombers within range of Russia to retaliate to a use of medium range rockets against Europe? In reality that was a bluff and Khrushchev knew it was a bluff.

NRBM

But we did not know it was a bluff and it could have been very effective. In any case, the willingness to use these tones, the very impression that Khrushchev seemed to be going out of his way to give at that time of brutality, even though it may not have been intended that way. But the impression that he gave in 1960 (pounding the table at the U.N. in the full sight of the cameras of the world with his shoe to get attention as a head of state) gave the impression that we were facing a man who could not be entirely predictable, not to carry out the threats that he was making.

Someone asked earlier if the Soviets have ever made such threats. And yes, there was a threat. Bluff yes, but not necessarily an

ineffective bluff. It did not disprove my strong sense that we lived in a world where what Hitler knew might prove relevant, useful, useable by somebody else. And in fact that was not true for the Soviets to a significant degree in the the sixties, in particular after it was revealed in early '61 that they did not have the vehicles with which to back up those threats.

1983 They were backed down by our threats in the Cuban missile crisis. And a Russian official said at that time to an American diplomat, "You will never be able to do this to us again." And they then spent over a trillion dollars on hardware so that they would not have to back down in the face of American threats of the kind that were being made then. They spent it on a particular kind of hardware (and I'll be discussing that not in the next lecture or two so much but in the last two or three lectures)—a kind of hardware that I believe has made the world very dangerous. And it's very possible that we will be seeing very ominous threats. And some of them may well be carried out before long. I think we do live in an extremely dangerous world right now in which threats will not be ruled out—even by nuclear winter—but will in fact be used as I've been asserting. As they are being used right now.

For that reason it is important to understand how people make threats effective, how they understand the process, the strategy of threats. Not, as some readers of my early lectures imagined I thought, not so as to advise people how to do threats and to advise people to make threats. Quite the contrary. I found them as ominous and dangerous then as I do today. But it seemed to me then and it seems to me now that it's

important to understand how threateners understand what they are doing so we can understand their behavior—so we can predict their behavior. I would say so we can resist and change their behavior in this world. I would have thought that it was obvious enough to choose Hitler for my example in those lectures (though it didn't come through to some people). But by choosing Hitler as the example I'm not saying look how clever, and admirable and imitable Hitler was but rather to say there is a technique involved here which can be understood—which has some coherence—and is worth understanding even though it is associated with a Hitler.

Somebody has asked me several times from the last lectures, am I really saying that the problem in the world is United States' policy? All the problems come from the United States. The United States, lets say, is the focus of evil in the world. I didn't think that in '59 when I did these lectures when I was still in the Marine Reserve. I didn't think it when I went in the Marines or Viet Nam and I don't think it today. I have never thought that. So let's be clear about that and if you need further evidence... On the contrary.

I won't go into it tonight at the end here, but I can say that I am very, very worried about a change that's made in the world for the Russians to have bought that trillion and a half dollars worth of equipment. Not precisely let's say for the same reasons that Reagan is worried about that, but I'm very worried. I don't think it makes the world safer. I think they have bought not only equipment that they believe has the purpose and the effect of freeing them from having to back down next time, but I find ourselves still making threats.

I can very well imagine that the day will come (if we live long enough) where they will be making threats, as I look at the nature of the hardware they are buying. So I don't think even the analysis that I then applied to Khrushchev (which actually was somewhat misguided in terms of Khrushchev then)... I don't think it is irrelevant to Russian behavior in the future today. And that's one reason the world is very dangerous.

Also while I do not think now, and I did not think then, that we have faced any Russian leader who is fundamentally (in a significant way) comparable to Hitler in the respects I'm describing here. I would not rule out that possibility some day, either in the Soviet Union or in other countries that can acquire these weapons. The weapons are relatively unusable in the hands of somebody who looks reasonable (as most of us would judge reasonableness). But that means... But they can be used by somebody who looks much less reasonable—more ideological, for example.

Someone came up and said, someone who believes better dead than red. Or better dead ⁿ than capitalist. Someone who has absolute values of that sort, or obedience of a certain kind—values of patriotism, loyalty, obedience, nationalism, whatever—makes it look worthwhile taking enormous risks of nuclear winter in order to achieve certain purposes. One major reason I think for ending the arms race as quickly as possible is indeed to avoid weapons of this sort—a new sort—getting into the hands of people who are much more like Hitler than any world leaders we've yet seen.

Obviously one thing I have learned is that the problem is not only the Soviet Union. When I wrote in '59 I hardly believed that my country

would dump four times the tonnage of WW II on Indo China and make a number of threats. Obviously it is my belief that we, our government, and we, are parted from the Soviet Union.

But just to answer some questions that I know have been raised by others—maybe I should have said it to the whole group when they were all here. And I'll say it again. It bears saying several times in the course of this course I think. That I think that deciding whether our governmental practice is just as bad as someone else's, or worse, or exactly the same, are not useful questions. Not meaningful on the whole to answer, certainly not the questions I'm addressing. But that it poses comparable risks and has horrible similarities in some respects in our behavior abroad. I think that's a fact as I understand it, and a very important one to understand.

Well, I will just give in effect a preview, in the last ten minutes, of the next lecture. But in order to tie what we have been saying today to the main subject of this course, I think I will, still, come back a bit on Hitler. Because I'd expected to get him more today because he was someone who in fact did understand threats, and his technique is well to be studied if we are to understand how someone who wants to make effective threats goes about doing it—if he knows what he is doing.

Trevor Roper in 1953 wrote an introduction to Hitler's secret conversations which said this: "Who was Hitler? How elusive his character remains. What he did is clear. But still, when asked not what he did, but how he did it, or rather how he was able to do it, historians evade the question, sliding away behind implausible answers." He said

"I've labored this point because I wish to maintain, contrary as it appears to all received opinion, that Hitler had a mind."

The aspect that's relevant to this in particular is that Hitler was quite selfconscious about his own reputation and cultivated it to some extent—as a madman. We're talking about a situation which I would say is true today but was true for Germany facing its strong opponents in the 1930s. But to make the kind of threats that are available to statesmen of today (or of Germany of that period) it is difficult to make them credible unless one appears in some respects erratic—unpredictable—to have abnormal values—determination, resolution. Here from a life of Chamberlain, who we're hearing a lot about today, (the word Chamberlain will be heard quite a bit in this election interestingly by Reagan I predict)... But Chamberlain was the man who came back from Munich having given away as his commitment to protect Czechoslovakia from the Germans... and announced that he had gotten peace in our time. He didn't actually believe that. He thought he had bought a little time in which to prepare defenses against Germany. But here are a few aspects of his understanding of Hitler that he was bargaining with.

"3 September, 1938." This was the summer, the year of Munich. He writes to his sisters, "Is it not positively horrible to think that the fate of hundreds of millions depends on one man and he is half mad. I deep racking my brains to try and devise some means of averting a catastrophe if it should seem to be upon us. I thought of one so unconventional and daring that it rather took Halifax's breath away but since Henderson thought (the ambassador) it might save the situation at

the eleventh hour I haven't abandoned it although I hope all the time that it won't be necessary to try it." This is the first hint in his letters of correspondence of his trip to Hitler as dramatic in its time as Sadat's trip to Jerusalem. He had not in fact ever flown before at that point and he looked down at one point (it's an interesting point) flying back from Burtsgarten he flew over the densely packed workers' housing in East London and thought how horrible it would be if they should be exposed to bombardment from Hitler. Not an unreasonable... He'd never seen it from the air before. "Even if it were to fail," he writes, "I should still say it was right to attempt it for the only alternative was war and I would never take that awesome responsibility on my shoulders unless it were forced upon me by the madness of others."

"11 September." He says, "I cannot allow the decision as to peace or war to pass out of our hands into those of the ruler of another country, and a lunatic at that." He came back from Germany saying, "Hitler was abnormal, incalculable, surrounded by evil advisors," incidentally he could not be long lived in this state of hysteria. Chamberlain said to one who saw him off on his second flight he was going to fight with "a wild beast."

"October 15, 1939. We have to kill one another just to satisfy that accursed madman. I wish he could burn in hell for as many years as he is costing lives." This did not weaken Hitler's position in the negotiations and Hitler in fact knew a great deal about that impression. I won't try to bear that out.

I think it is worth talking more about Hitler and the impression he made. I'm giving this taste in the next lecture. I had planned to cover

it in this lecture but I won't. I'll just say that having given this lecture—actually three lectures, it took that long—on Hitler's threats in the 30s by which he took over the Rhineland, Austria, and all of Czechoslovakia in two bites—four major advances, without firing a single shot—that it was Hitler, I said, to whom one should turn to understand how blackmail is used. Here is the master, here is the man who can use it. How it came out for Hitler we know. And the end for Hitler was not unrelated to the tactics which had won him success in the beginning. It was not unrelated to the successes that he did achieve, in fact. It flowed directly from that. But he won and won until he lost. And he did it quite cleverly and he knew what he was doing. He used his madness.

At one point I said if he had not been Hitler he might have invented Hitler. And I gave these lectures then which were entitled "The Political Uses of Madness." In 1970, (a year after I had copied the Pentagon Papers, actually, but still almost 9 months before they came out), I had the chance to go to San Clemente—the new site of the Nixon Library—with a friend of mine who was a reporter who was there to talk to Kissinger about his girl friends (which he was reporting and took me along). I went for a number of reasons that might be worth mentioning another time.

One thing that had been coming out in the newspapers at that time was hints that there was a belief in the Administration in the value of the ambiguity of appearing impulsive—of appearing erratic. That Russians could not count exactly on what we were likely to do (which I thought was

an attitude that I thought I had once analyzed a long time earlier) and it worried me because of my sense of the dangers associated with it.

Here's from Nixon's memoirs. Nixon quotes a POW after their return from the POW... with approval... "He made an interesting analogy on the point that the North Vietnamese really thought the President was off his rocker—was totally irrational. He—the POW—said it was absolutely essential for them to think that." That's Nixon quoting the POW. Early in 1969, Kissinger's memoirs—or rather Nixon's memoirs: "Kissinger thought our credibility vis-a-vis the Communist world was at stake in our response to this deliberate challenge" (which was some events in early '69). The Soviets, the North Vietnamese and the Chinese would all be watching. "If we strike back, even though it's risky" he, Kissinger said, "they will say 'This guy's becoming irrational, we'd better settle with him.' But if we back down they'll say 'This guy is the same as his predecessor and if we wait he'll come to the same end.'" (His predecessor, Johnson.) "I agreed we had to act boldly" and so forth. It's a calculated risk.

Specifically this had to do with the Middle East which I'll be coming to later. Some indications in the papers that there were those in the Administration who believed that it was useful to act unpredictably and seemingly against our interest—impulsively so they couldn't predict what we were likely to do.

Went out to San Clemente and the first words that Kissinger (whom I hadn't seen since early '69, this was '70 when I worked for him for a while, briefly) he turned to my newspaper friend and he said, "How did

you two get together?" (We'd actually known each other for a long time.) And then he turned to Shearer, Lloyd Shearer, the editor of Parade and said, "I haff learned more from Don Ellsberg than from any other person on the subject of..." (and I thought he was going to say Viet Nam because he had once said that at a meeting at Rand). He is extremely fullsome in the presence of someone, hands out stuff like this, he's not too generous with footnotes in his career. But this is the kind of thing he says so I thought he was going to say again, I've learned more from the subject of Viet Nam and instead he said in 1970, "I've learned more from Don Ellsberg than any other person on the subject of bargaining." This is, by the way before he went to China, and before he became known as the world's greatest bargainer. And I am... if I ever publish these lectures this is going on the flyleaf of the lectures, I can assure you, you know, "I have learned more, you know,... Henry Kissinger, you know. Shearer remembers this.

But first I was totally taken aback. I couldn't think what in the world he was talking about. I'd never discussed bargaining with him in the years in the government. And then I remembered the Lowell Lectures. I'd given two of them on this subject to his seminar at Harvard. And so I remembered that and I said, "You have a very good memory." And he said, "They ver very good lectures." And I thought that was very nice. And then it took me that long—a double take here—to remember what those lectures had been about. And they had been about Hitler's blackmail of Czechoslovakia, Austria and so forth—his bloodless aggression of the thirties.

And it did not enter my head then or now that I had taught Henry Kissinger anything about bargaining, unless a way to describe things which he knew perfectly well—and most of the principles of this are implicit in his own earlier book before I met him, Nuclear Weapons and Foreign Policy for which this course is named. He wrote that in '57. So the thoughts are all there but I'd given him something of a framework for this. But the thought that this Assistant to the President had in his mind in 1970, lectures that I had given 12 years earlier, which I had forgotten, on the political uses of madness was an upsetting thought to me. It actually made the hair on the back of my head rise a bit. I didn't like the thought that people were thinking of that in the White House.

Well, I did think I knew what his strategy was. It did look ominously familiar to me and I was struck (to end here) with reading Haldeman's memoirs (which if you have read my paper you will have read this passage) explaining how Nixon saw that theory—what he was doing. This was in 1978, eight years later. "When Nixon spoke of his desire to be a peacemaker he was not just delivering words his listeners wanted to hear. Nixon not only wanted to end the Viet Nam war, he was absolutely convinced he would end it in his first year. I remember during the campaign in '68, walking along a beach he once said 'I'm the one man in the country who can do it, Bob.' He was going to use the same method [if you've read this] that Eisenhower had used to end the Korean War. We were walking along a foggy beach after a long day of speech writing. He said, 'I call it the Madman Theory, Bob. I want the North Vietnamese to

believe I've reached the point where I might do anything to stop the war. We'll just slip the word to them that, for God's sake, you know Nixon is obsessed about Communism. We can't restrain him when he's angry and he has his hand on the nuclear button. And Ho Chih Minh himself will be in Paris in two days begging for peace.'"

How it came out we'll discuss next time.